

Maristya Ryan Prabowo. 2016. Pengaruh Variasi Dosis Probiotik Cair dengan Interval Waktu Pemberian Satu Hari Sekali pada Air Minum Ternak terhadap Pertumbuhan Ayam Broiler (*Gallus gallus domesticus*). Skripsi ini di bawah bimbingan Drs. Agus Supriyanto, M.Kes. dan Dr. Sri Puji Astuti Wahyuningsih, M.Si. Departemen Biologi, Fakultas Sains dan Teknologi, Universitas Airlangga, Surabaya.

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh pemberian probiotik cair dengan interval waktu pemberian satu hari sekali dalam berbagai dosis terhadap berat badan dan *Feed Conversion Ratio* (FCR) pada ayam broiler. Penelitian ini bersifat eksperimental dengan Rancangan Acak Lengkap (RAL). Penelitian ini terdiri dari enam perlakuan, yaitu kontrol, probiotik 1%, 2%, 3%, 4%, dan 5%. Setiap perlakuan terdiri atas 5 ulangan. Mikroba dalam probiotik cair terdiri atas *Bacillus subtilis*, *Bacillus licheniformis*, *Saccharomyces cerevisiae*, *Lactobacillus acidophilus*, *Lactobacillus fermentum*, *Lactobacillus plantarum*, dan *Lactobacillus casei*. Parameter yang diuji adalah berat badan dan FCR. Data berat badan setiap minggu dianalisis dengan menggunakan ANOVA satu arah dan uji Duncan ($\alpha=5\%$), FCR dianalisis secara deskriptif. Hasil penelitian menunjukkan perlakuan dosis probiotik 0% berat badan ($1270 \pm 27,39$ g) dengan FCR (1,25), dosis probiotik 1% berat badan ($1320 \pm 20,91$ g) dengan FCR (1,21), dosis probiotik 2% ($1360 \pm 28,50$ g) dengan FCR (1,17), dosis probiotik 3% berat badan ($1445 \pm 27,39$ g) dengan FCR (1,10), dosis probiotik 4% berat badan ($1532 \pm 44,38$) dengan FCR (1,03), dan dosis probiotik 5% memberikan hasil tertinggi untuk berat badan ($1620 \pm 44,72$ g) dan memberikan hasil terendah FCR (0,98).

Kata kunci: *Gallus gallus domesticus*, probiotik cair, berat badan, FCR.

Maristya Ryan Prabowo. 2016. Effects of Dosage Variations Liquid Probiotic with Interval Time Once A Day in Livestock Water to Broiler Chickens (*Gallus gallus domesticus*) Growth. Thesis supervised by Drs. Agus Supriyanto, M.Kes. and Dr. Sri Puji Astuti Wahyuningsih, M.Si. Department of Biology, Faculty of Science and Technology, Universitas Airlangga, Surabaya.

ABSTRACT

The aim of study was knowing the effects of dosage variations of liquid probiotic with interval time once a day to weight and Feed Conversion Ratio (FCR) of broiler chickens. This study was experimental with Completely Randomized Design (CRD). Six different treatments used in this study, which were control treatment, 1% probiotic, 2% probiotic, 3% probiotic, 4% probiotic, 5% probiotic. Five replications performed on each treatment. Microbe used in liquid probiotics were *Bacillus subtilis*, *Bacillus licheniformis*, *Saccharomyces cerevisiae*, *Lactobacillus acidophilus*, *Lactobacillus fermentum*, *Lactobacillus plantarum*, and *Lactobacillus casei*. The parameters tested were weight and FCR. The data of weight each week analyzed by One Way Anova and Duncan test ($\alpha=5\%$), and FCR analyzed by descriptive method. The result of this study shows that weight of probiotics dosage 0% was ($1270 \pm 27,39$ g) with FCR (1,25), weight of probiotics dosage 1% was ($1320 \pm 20,91$ g) with FCR (1,21), weight of probiotics dosage 2% was ($1360 \pm 28,50$ g) with FCR (1,17), weight of probiotics dosage 3% was ($1445 \pm 27,39$ g) with FCR (1,10), weight of probiotics dosage 4% was ($1532 \pm 44,38$) with FCR (1,03), and probiotics dosage of 5% showing the highest result for the chicken weight, which was ($1620 \pm 44,72$ g) and giving the lowest result of FCR, which was (0,98).

Keywords : *Gallus gallus domesticus*, liquid probiotic, weight, FCR.